Marine Corps Combat Development Command (MCCDC)

NBC Defense Requirements

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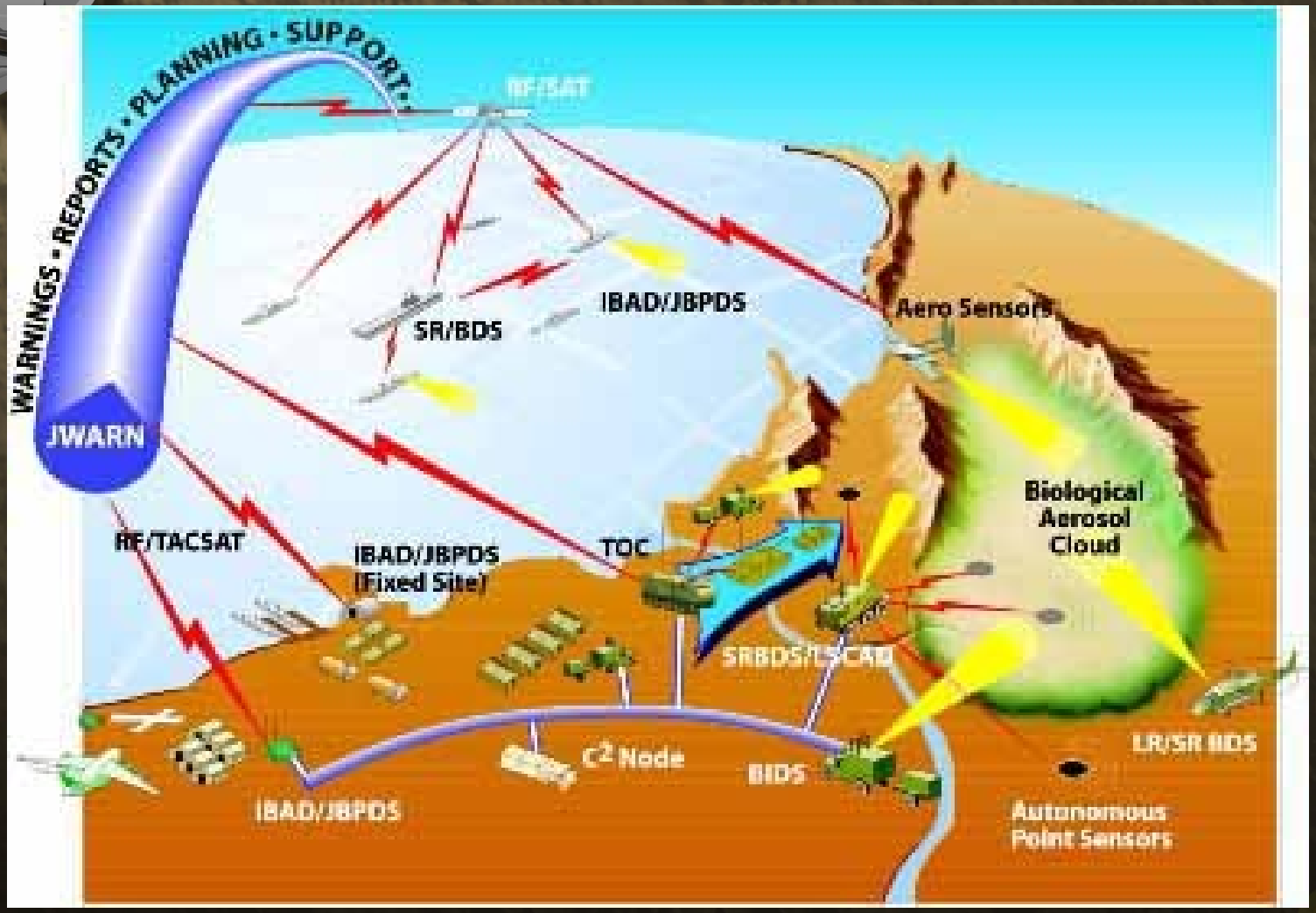
Shape Programs

- Joint Warning and Reporting Network (JWARN)
- Joint Effects Model (JEM)
- Joint Operational Effect Federation (JOEF)

Joint Warning and Reporting Network – Full Capacity (JWARN)



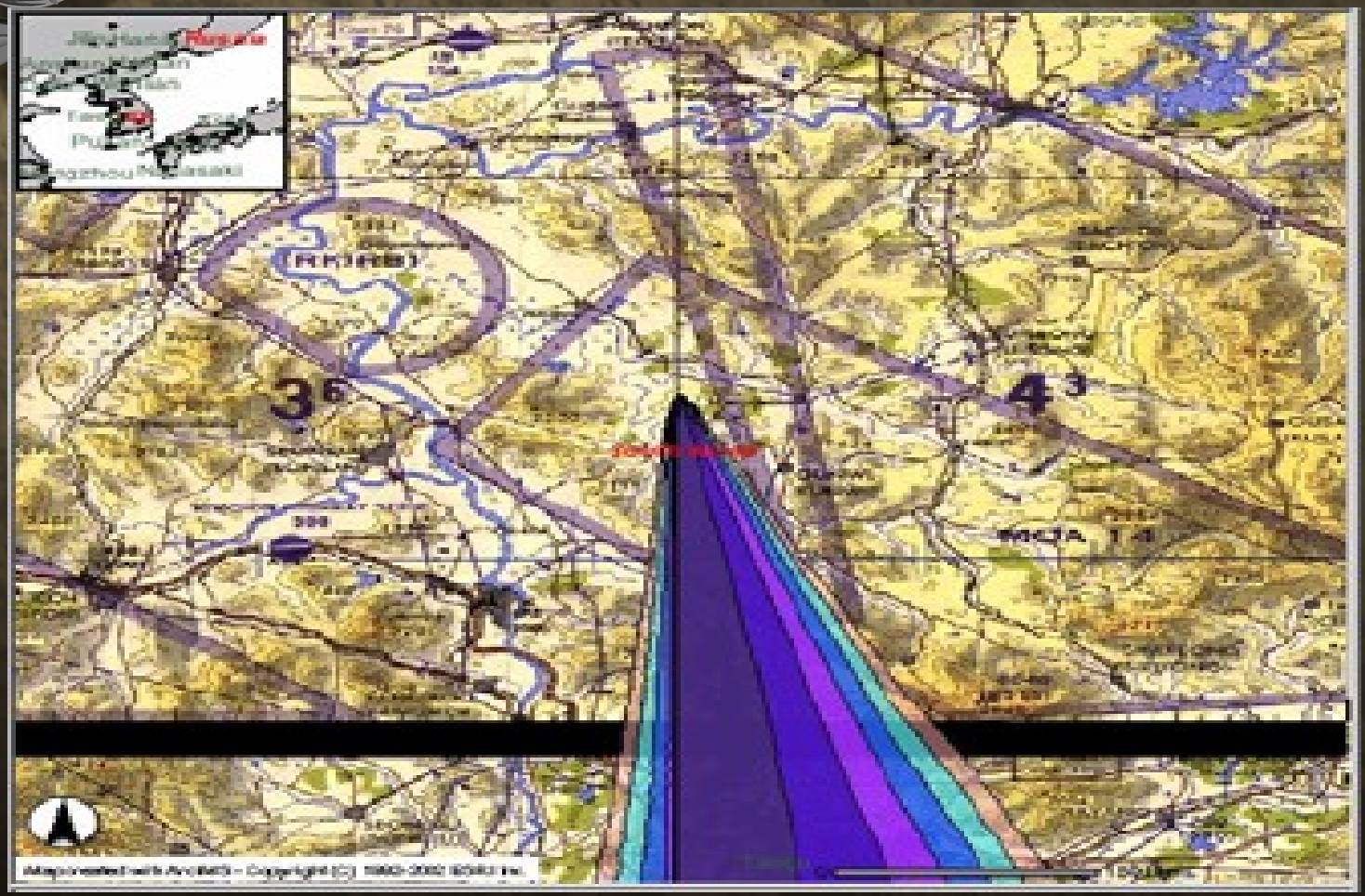
Joint Warning and Reporting Network – Full Capacity (JWARN)

Capabilities: Provide Joint community
with analysis & response capability for
CBRN & TIM hazards/accidents/incidents

Fielding: 2007

Quantity: 262

Joint Effects Module (JEM)



Joint Effects Module (JEM)

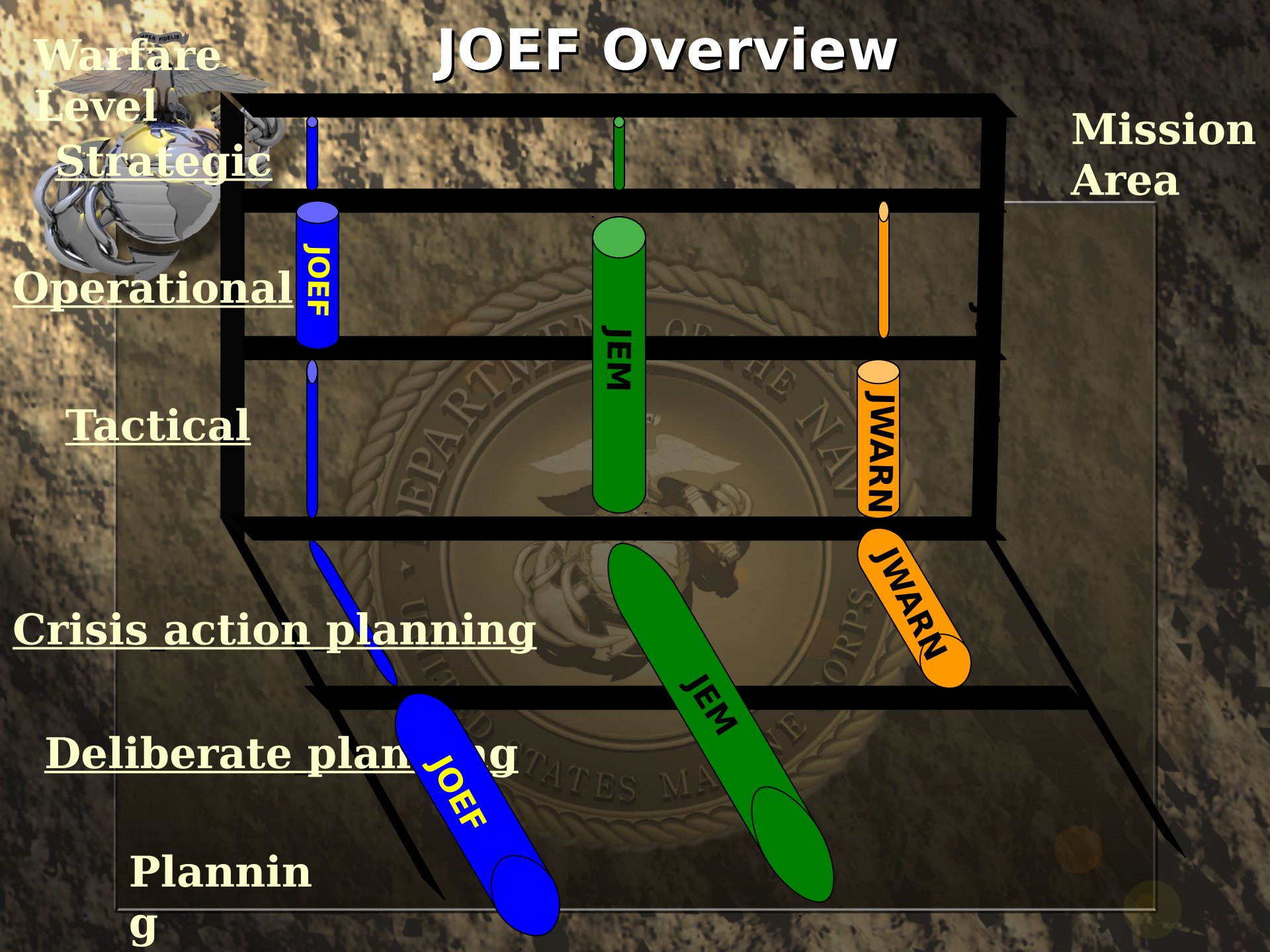
Capabilities: Operates w/JWARN by providing a more advanced plot for NBC Hazard Prediction Models

Fielding: 2005

Quantity: 18

MSC & Higher

JOEF Overview



Joint Operational Effects Federation (JOEF)

Capabilities: Determine the effects and assess the impact and risks associated with CBRN/TIM hazards on military operations

Fielding: TBD

Quantity: Possibly 7

PAC/LANT MEF/SPMAGTF (Potentially level)

Sense Programs (currently in development)

Nuclear (Radiological)

- No active programs

Sense Programs (continued)

Biological

- Joint Biological Point Detection System (JBPDS)
- Joint Biological Standoff Detection System (JBSDS)
- Joint Biological Tactical Detection System (JBTDS)

Sense Programs (continued)

Chemical

- Joint Chemical Agent Detector (JCAD)
- Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD)
- Standoff Chemical Agent Detector (ARTEMIS)

Chemical / Biological

- Joint Modular Chemical Biological Detection System (JMCBDS)

Sense Programs (continued)

Nuclear (Radiological)/Chemical/Biological

- **Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM)**
- **Joint Service Light Nuclear, Biological, Chemical Reconnaissance System (JSLNBCRS)**

Joint Biological Point Detector System (JBPDS)

Joint Biological Point Detector System (JBPDS)

Capabilities:
- Detects up to 10 agents at a time, auto triggering, collection, detection & ID
- Local, remote or network operation
- Generates NBC-1 & 4 Bio reports

Fielding: 2007

AO: 59 (JSLNBCRS)

Joint Biological Standoff Detection System (JBSDS)

Joint Biological Standoff Detection System (JBSDS)

Capabilities:

- Block I - Standoff detection, ranging, tracking, generic aerosol detection and discrimination of BW aerosol clouds for advanced warning, reporting and protection.
- Block II - Contain on the move capability
- Provide early warning via JWARN

AQ & Fielding: TBD

Joint Biological Tactical Detection System (JBTDS)

Joint Biological Tactical Detection System (JBTDS)

Capability:

- Handheld
- Detect, warn & isolate sample
- Collect & preserve for evac and analysis
- Integrate with early warning system
- Acts in 2 modes
    - Command module
    - Control module

Dry Filter Unit (DFU) Biological Detection System

Dry Filter Unit (DFU) Biological Detection System

Capabilities:

- Ability to detect and provide early warning
- Collects Bio aerosol for further analysis
- Conducts presumptive ID of Bio agents
- Requires Assay tickets

- AO/Fielding I MEF received 40 in support of OIF

Joint Chemical Agent Detector (JCAD)

Joint Chemical Agent Detector (JCAD)

Capability:

- Auto Detects/ID’s/Quantifies: VX,GA,GB, GD,GF,HD

Possible future incremental approach:

- Agents: L,HN3,AC
- Warn of low level CW agents W/I interior of vehicles

Fielding: Delayed until 2006

Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD)

Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD)

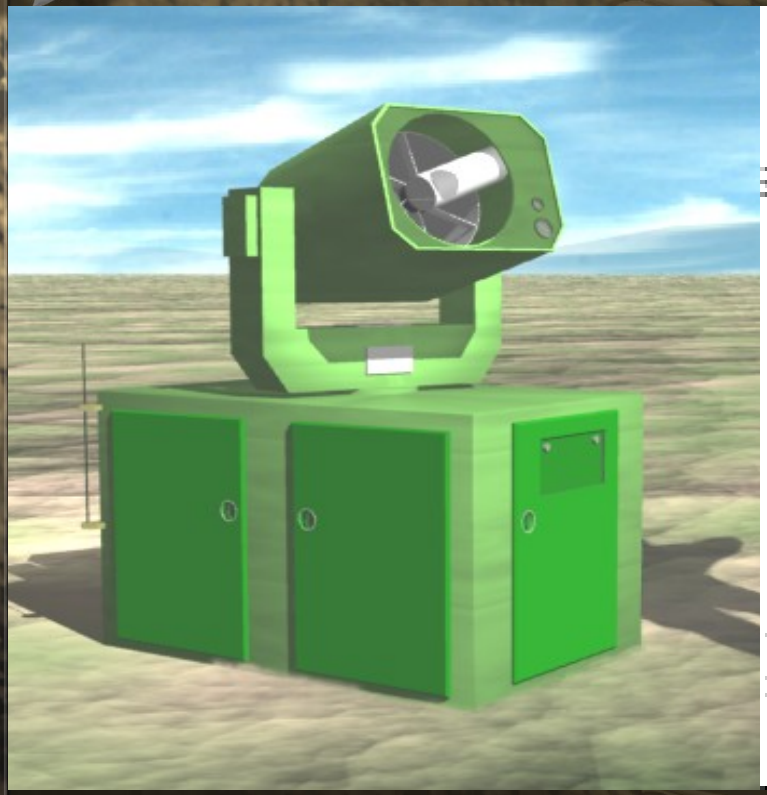
Capabilities:

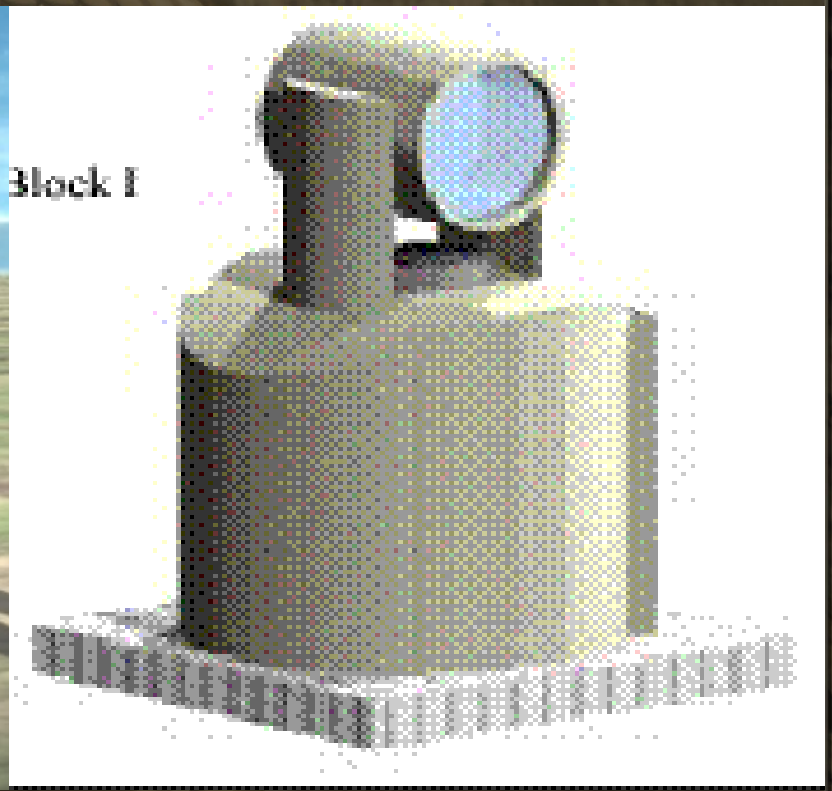
- Detect presence or absence at a distance of up to 5km
- Nerve & Blister vapors
- Stationary
- Integrate with early warning system

AO: 59 (JSLNBCRS)

Fielding: JSLNBCRS only

Standoff Chemical Agent Detector (ARTEMIS)





Standoff Chemical Agent Detector ARTEMIS

Capabilities:

- Meets and exceeds JSLSCAD
  - Aerosol & Vapor capable
  - Active detection capability
  - Detect on the move

Joint Modular Chemical Biological Detection System (JMCBDS)

Capabilities:

- Handheld, light weight, point, stationary & on the move CB/TIM detection
- Employed in various modes (e.g.: exterior & interior, UAV's, fixed sites, ships)
- Capable of early warning & reporting

Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM)

Capabilities:
- Detect, ID & Quantify Chemical, Biological & Radiological agents in water
- Man portable, upgradeable
- Integrated with early warning system

Until further technology is available:
- Bio Assays may be incorporated into current water test kit

Joint Service Light Nuclear Biological Chemical Reconnaissance System (JSLNBCRS)

Joint Service Light Nuclear Biological Chemical Reconnaissance System (JSLNBCRS)

Capabilities:

- JSLSCAD – Stand-off, on-the-move, chemical vapor detection
- CBMS Block II – Liquid surface chemical detection (currently no air sampling capability)
- JBPDS - Biological Detection
- JWARN to Analyze and Report
- AN/VDR-2, ACADA, CAM II

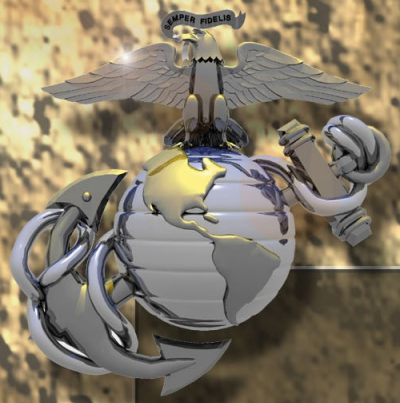
Joint Service Light Nuclear Biological Chemical Reconnaissance System (JSLNBCRS)

Fielding

HMMWV	2006/07
LAV	2005/06

Joint Service Light Nuclear Biological Chemical Reconnaissance System (JSLNBCRS)

NBCRS Location	NBCRS Variant	Total NBCRS
1ST LAR Bn, 1st MarDiv	LAV	4
2nd LAR Bn, 2nd MarDiv	LAV	6
3rd LAR Bn, 1st MarDiv	LAV	2
4th LAR Bn, 4th Mardiv	LAV	4
Combat Assault Bn, 3rd MarDiv	LAV	4
H&S Bn, 1st FSSG	HMMWV	6
H&S Bn, 2nd FSSG	HMMWV	6
H&S Bn, 3rd FSSG	HMMWV	5
H&S Bn, 4th FSSG	HMMWV	5
MWHS, 1st MAW	HMMWV	2
MWHS, 2nd MAW	HMMWV	4
MWHS, 3rd MAW	HMMWV	4
MWHS, 4th MAW	HMMWV	3
Ft Leonard Wood, USMC NBC School	LAV	2
Ft Leonard Wood, USMC NBC School	HMMWV	2
		59



QUESTIONS?